Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (canceled)

Claim 4 (currently amended): A magnetron drive power supply comprising a commercial power supply, a high-frequency inverter for converting electric power of the commercial power supply into high-frequency power and supplying the high-frequency power to a high-voltage transformer, a high-voltage rectification circuit and a magnetron being connected to secondary output of the high-voltage transformer, a means to monitor the voltage of the commercial power supply comprising an input current detector which detects a current value of the high-frequency inverter, and controller for controlling the high-frequency inverter, ~~characterized in that~~ wherein loss of voltage from the commercial power supply is determined ~~and the controller stops the high-frequency inverter~~ if a state where the detection value of the input current detector ~~has a predetermined difference from~~ is lower than a target value ~~continuously~~ by a predetermined difference is continued for a given time, the controller stops the high-frequency inverter.

Claim 5 (original): The magnetron drive power supply as claimed in claim 4 wherein the predetermined difference between the detection value of the input current detector and the target value is set in response to the target value.